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Substitute for form 1445/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				<i>Complete if Known</i>		
				Application Number	10/692,833	
				Filing Date	2003-10-23	
				First Named Inventor	J. Rodney Walton	
				Art Unit	2618	
				Examiner Name	Simon Nguyen	
Sheet	1	of	18	Attorney Docket No: 030060		

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ^{2(f)} (known)			
	001	US5241544	08-31-1993	JASPER; Steven C., et al.	
	002	US5295159	03-15-1994	KERPEZ; Kenneth J.	
	003	US5471647	11-28-1995	GERLACH; Derek, et al.	
	004	US5606729	02-25-1997	D'amico; Thomas	
	005	US5818813	10-06-1998	SAITO; Masafumi, et al.	
	006	US5832387	11-03-1998	BAE; Hee-Moon, et al.	
	007	US5867478	02-02-1999	BAUM; Kevin Lynn, et al.	
	008	US5886988	03-23-1999	YUN; Louis C., et al.	
	009	US5973638	10-26-1999	ROBBINS; David F., et al.	
	010	US6084915	07-04-2000	WILLIAMS; Richard G. C.	
	011	US6097771	08-01-2000	FOSCHINI; Gerard Joseph	
	012	US6115354	09-05-2000	WECK; Christfried	
	013	US6131016	10-10-2000	GREENSTEIN; Lawrence Joel, et al.	
	014	US6141542	10-31-2000	KOTZIN; Michael D., et al.	
	015	US6141567	10-31-2000	YOUSSEFMIR; Michael, et al.	
	016	US6163296	12-19-2000	LIER; Erik, et al.	
	017	US6167031	12-26-2000	OLOFSSON; H. Ang. Kan Gunnar, et al.	
	018	US6178196	01-23-2001	NAGUIB; Ayman F., et al.	
	019	US6232918	05-15-2001	WAX; Mati, et al.	
	020	US6266528	07-24-2001	FARZANEH; Farhad	

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/Simon Nguyen/

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		Number-Kind Code ^{2(f)} (known)			
	021	US6278726	08-21-2001	MESECHER; David K., et al.	
	022	US6298035	10-02-2001	HEISKALA; Juha	
	023	US6308080	10-23-2001	BURT; Donald G., et al.	
	024	US6314289	11-06-2001	EBERLEIN; Ernst, et al.	
	025	US6317612	11-13-2001	FARSAKH; Christof	
	026	US6339399	01-15-2002	ANDERSSON; Soren, et al.	
	027	US6345036	02-05-2002	SUDO; Hiroaki, et al.	
	028	US6346910	02-12-2002	ITO; Tei	
	029	US6377812	04-23-2002	RASHID-FARROKHI; Farrokh, et al.	
	030	US6385264	05-07-2002	TERASAWA; Daisuke, et al.	
	031	US6452981	09-17-2002	RALEIGH; Gregory G., et al.	
	032	US6473467	10-29-2002	WALLACE; Mark, et al.	
	033	US6492942	12-10-2002	KEZYS; Vytas	
	034	US6532562	03-11-2003	CHOU; Philip A., et al.	
	035	US6545997	04-08-2003	BOHNKE; Ralf, et al.	
	036	US6574211	06-03-2003	PADOVANI; Roberto, et al.	
	037	US6574271	06-03-2003	MESECHER; David K., et al.	
	038	US6594798	07-15-2003	CHOU; Philip A., et al.	
	039	US6597682	07-22-2003	KARI; Hannu	

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		Number-Kind Code ^{2(f)} (known)			
	040	US6608874	08-19-2003	BEIDAS; Bassel F., et al.	
	041	US6611231	08-26-2003	CRILLY; Jr. William J., et al.	
	042	US6654590	11-25-2003	BOROS; Tibor, et al.	
	043	US6668161	12-23-2003	BOROS; Tibor, et al.	
	044	US6683916	01-27-2004	SARTORI; Philippe Jean-Marc, et al.	
	045	US6690660	02-10-2004	KIM; Younglok, et al.	
	046	US6728233	04-27-2004	PARK; Jin-Soo, et al.	
	047	US6738020	05-18-2004	LINDSKOG; Erik D., et al.	
	048	US6751187	06-15-2004	WALTON; Jay R., et al.	
	049	US6751444	06-15-2004	MEIYAPPAN; Palaniappan	
	050	US6751480	06-15-2004	KOGIANTIS; Achilles George, et al.	
	051	US6760388	07-06-2004	KETCHUM; John W., et al.	
	052	US6771706	08-03-2004	LING; Fuyun, et al.	
	053	US6785341	08-31-2004	WALTON; Jay R., et al.	
	054	US6785513	08-31-2004	SIVAPRAKASAM; Srinivas	
	055	US6788948	09-07-2004	LINDSKOG; Erik D., et al.	
	056	US6795424	09-21-2004	KAPOOR; Samir, et al.	
	057	US6802035	10-05-2004	CATREUX; Severine, et al.	
	058	US6850498	02-01-2005	HEATH; Robert W., et al.	
	059	US6862440	03-01-2005	SAMPATH; Hemanth	

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		Number-Kind Code ^{2(f)} (known)			
	060	US6873651	03-29-2005	TESFAI; Yohannes, et al.	
	061	US6879578	04-12-2005	PAN; Jung-Lin, et al.	
	062	US6888809	05-03-2005	FOSCHINI; Gerard Joseph, et al.	
	063	US6937592	08-30-2005	HEATH; Jr. Robert W., et al.	
	064	US6963742	11-08-2005	BOROS; Tibor, et al.	
	065	US6965762	11-15-2005	SUGAR; Gary L., et al.	
	066	US6985434	01-10-2006	WU; Shiquan, et al.	
	067	US6987819	01-17-2006	THOMAS; Timothy A., et al.	
	068	US6990059	01-24-2006	ANIKHINDI; Santosh, et al.	
	069	US6992972	01-31-2006	VAN NEE; Richard	
	070	US7006483	02-28-2006	NELSON; Jr. George Rodney, et al.	
	071	US7009931	03-07-2006	MA; Jianglei, et al.	
	072	US7012978	03-14-2006	TALWAR; Shilpa	
	073	US7062294	06-13-2006	ROGARD; Roger, et al.	
	074	US7068628	06-27-2006	Li; Ye, et al.	
	075	US7072410	07-04-2006	MONSEN; Peter	
	076	US7072413	07-04-2006	WALTON; Jay R., et al.	
	077	US7088671	08-08-2006	MONSEN; Peter	
	078	US7095709	08-22-2006	WALTON; Jay R., et al.	
	079	US7099377	08-29-2006	BERENS; Friedbert, et al.	

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		Number-Kind Code ^{2(f)} (known)			
	080	US7110378	09-19-2006	ONGGOSANUSI; Eko Nugroho, et al.	
	081	US7110463	09-19-2006	WALLACE; Mark S., et al.	
	082	US7113499	09-26-2006	NAFIE; Mohammed, et al.	
	083	US7149254	12-12-2006	SAMPATH; Hemanth	
	084	US7151809	12-19-2006	KETCHUM; John W., et al.	
	085	US7155171	12-26-2006	EBERT; Paul Michael, et al.	
	086	US7197084	03-27-2007	KETCHUM; John W., et al.	
	087	US7200404	04-03-2007	PANASIK; Carl M., et al.	
	088	US7206354	04-17-2007	WALLACE; Mark S., et al.	
	089	US7218684	05-15-2007	BOLOURCHI; Nader, et al.	
	090	US7224704	05-29-2007	LU; Xiaolin, et al.	
	091	US7231184	06-12-2007	EILTS; Henry S., et al.	
	092	US7233625	06-19-2007	MA; Jianglei, et al.	
	093	US7238508	07-03-2007	LIN; Min, et al.	
	094	US7248638	07-24-2007	BANISTER; Brian C.	
	095	US7254171	08-07-2007	HUDSON; John E.	
	096	US7263119	08-28-2007	HSU; Yungping, et al.	
	097	US7280625	10-09-2007	KETCHUM; John W., et al.	
	098	US7289570	10-30-2007	SCHMIDL; Timothy, et al.	
	099	US7298778	11-20-2007	VISOZ; Raphael, et al.	
	100	US7298805	11-20-2007	WALTON; J. Rodney, et al.	

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	101	US7310304	12-18-2007	MODY; Apurva N., et al.	
	102	US7317750	01-08-2008	SHATTIL; Steve J.	
	103	US7324429	01-29-2008	WALTON; J. Rodney, et al.	
	104	US7342912	03-11-2008	KERR; Adam B., et al.	
	105	US7386076	06-10-2008	ONGGOSANUSI; Eko N., et al.	
	106	US7403748	07-22-2008	KESKITALO; Ilkka, et al.	
	107	US7421039	09-02-2008	MALAENDER; Laurence Eugene, et al.	
	108	US7480278	01-20-2009	PEDERSEN; Klaus Ingemann, et al.	
	109	US7492737	02-17-2009	FONG; Mo-Han, et al.	
	110	US7623871	11-24-2009	SHEYNBLAT; Leonid	
	111	US7636573	12-22-2009	WALTON; Jay R., et al.	
	112	US7653415	01-26-2010	VAN ROOYEN; Pieter	
	113	US20010046205	11-29-2001	EASTON; Kenneth D., et al.	
	114	US20020003774	01-10-2002	WANG; Zhaocheng, et al.	
	115	US20020018310	02-14-2002	HUNG; Tsan-Yao	
	116	US20020018453	02-14-2002	YU; Yao, et al.	
	117	US20020041632	04-11-2002	SATO; Kazushi, et al.	
	118	US20020044591	04-18-2002	LEE; Hyun-Woo, et al.	
	119	US20020057659	05-16-2002	OZLUTURK; Fatih M., et al.	
	120	US20020064214	05-30-2002	HATTORI; Toshihiro, et al.	

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		Number-Kind Code ² (if known)			
	121	US20020072336	06-13-2002	MOTTIER; David	
	122	US20020085620	07-04-2002	MESECHER; David K.	
	123	US20020085641	07-04-2002	BAUM; Kevin L.	
	124	US20020098872	07-25-2002	JUDSON; Bruce A.	
	125	US20020105928	08-08-2002	KAPOOR; Samir, et al.	
	126	US20020115473	08-22-2002	HWANG; Jong Yoon, et al.	
	127	US20020122381	09-05-2002	WU; Shiquan, et al.	
	128	US20020127978	09-12-2002	KHATRI; Bhavin S.	
	129	US20020183010	12-05-2002	CATREUX; Severine E., et al.	
	130	US20020184453	12-05-2002	HUGHES; Suzanne M., et al.	
	131	US20020191535	12-19-2002	SUGIYAMA; Takatoshi, et al.	
	132	US20020196842	12-26-2002	ONGGOSANUSI; Eko N., et al.	
	133	US20030002450	01-02-2003	JALALI; Ahmad, et al.	
	134	US20030012308	01-16-2003	SAMPATH; Hemanth T., et al.	
	135	US20030048856	03-13-2003	KETCHUM; John W., et al.	
	136	US20030078024	04-24-2003	MAGEE; David Patrick, et al.	
	137	US20030095197	05-22-2003	WHEELER; Richard B., et al.	
	138	US20030099306	05-29-2003	NILSSON; Johan, et al.	

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				Application Number	10/692,833	
				Filing Date	2003-10-23	
				First Named Inventor	J. Rodney Walton	
				Art Unit	2618	
				Examiner Name	Simon Nguyen	
Sheet	8	of	18	Attorney Docket No: 030060		

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ^{2(f)} (known)			
	139	US20030119452	06-26-2003	KIM; Sung-Hoon, et al.	
	140	US20030128656	07-10-2003	SCARPA; Carl	
	141	US20030139194	07-24-2003	ONGGOSANUSI; Eko N., et al.	
	142	US20030153360	08-14-2003	BURKE; Joseph P., et al.	
	143	US20030157954	08-21-2003	MEDVEDEV; Irina, et al.	
	144	US20030162519	08-28-2003	SMITH; Martin, et al.	
	145	US20030185309	10-02-2003	PAUTLER; Joseph J., et al.	
	146	US20030206558	11-06-2003	PARKKINEN; Teemu, et al.	
	147	US20030235149	12-25-2003	CHAN; Albert, et al.	
	148	US20030235255	12-25-2003	KETCHUM; John W., et al.	
	149	US20040052228	03-18-2004	TELLADO; Jose, et al.	
	150	US20040071104	04-15-2004	BOESEL; Robert W., et al.	
	151	US20040082356	04-29-2004	WALTON; J. Rodney, et al.	
	152	US20040085939	05-06-2004	WALLACE; Mark S., et al.	
	153	US20040136349	07-15-2004	WALTON; J. Rodney, et al.	
	154	US20040160987	08-19-2004	SUDO; Hiroaki, et al.	
	155	US20040179627	09-16-2004	KETCHUM; John W., et al.	
	156	US20040198276	10-07-2004	TELLADO; Jose, et al.	
	157	US20050047384	03-03-2005	WAX; Mati, et al.	
	158	US20050111599	05-26-2005	WALTON; J. Rodney, et al.	
	159	US20050120097	06-02-2005	WALTON; J. Rodney, et al.	

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		Number-Kind Code ² (if known)			
	160	US20050128953	06-16-2005	WALLACE; Mark S., et al.	
	161	US20060104196	05-18-2006	WU; Shiquan, et al.	
	162	US20070177681	08-02-2007	CHOI; In-Kyeong, et al.	
	163	US20080285488	11-20-2008	WALTON; J. Rodney, et al.	
	164	US20080285669	11-20-2008	WALTON; J. Rodney, et al.	
	165	US20080285670	11-20-2008	WALTON; J. Rodney, et al.	
	166	US20100183088	07-22-2010	INANOGLU; Hakan	
	167	US20100260060	10-14-2010	ABRAHAM; Santosh, et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T 6
		Country Code ³ - Number ⁴ Kind Code ⁵ (if known)				
	168	AU2002259221	11-25-2002	QUALCOMM INCORPORATED [US]		<input type="checkbox"/>
	169	CA2690247A1	10-11-2001	QUALCOMM INC [US]		<input type="checkbox"/>
	170	CN1086061	04-27-1994	ERICSSON GE MOBILE COMMUNICAT.		<input type="checkbox"/>
	171	CN1308794	08-15-2001	ARRAYCOM INC. [US]		<input checked="" type="checkbox"/>
	172	CN1489836A	04-14-2004	MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD [JP]		<input type="checkbox"/>
	173	DE19951525A1	06-07-2001	SIEMENS AG [DE]		<input checked="" type="checkbox"/>

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				Application Number	10/692,833	
				Filing Date	2003-10-23	
				First Named Inventor	J. Rodney Walton	
				Art Unit	2618	
				Examiner Name	Simon Nguyen	
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		Country Code ³ - Number ⁴ Kind Code ⁵ (if known)				
	174	EP0762701	03-12-1997	ADVANCED DIGITAL TELEVISION BROADCASTING LABORATORY [JP]		<input type="checkbox"/>
	175	EP0805568A1	11-05-1997	TRW INC [US]		<input type="checkbox"/>
	176	EP0929172A1	07-14-1999	LUCENT TECHNOLOGIES INC [US]		<input type="checkbox"/>
	177	EP0951091A2	10-20-1999	LUCENT TECHNOLOGIES INC [US]		<input type="checkbox"/>
	178	EP1061446	12-20-2000	SUN MICROSYSTEMS, INC. [US]		<input type="checkbox"/>
	179	EP1087545A1	03-28-2001	NATIONAL UNIV. OF SINGAPORE [SG]		<input type="checkbox"/>
	180	EP1117197A2	07-18-2001	LUCENT TECHNOLOGIES INC [US]		<input type="checkbox"/>
	181	EP1133070A2	09-12-2001	MATSUSHITA ELECTRIC IND CO LTD [JP]		<input type="checkbox"/>
	182	EP1175022A2	01-23-2002	SAMSUNG ELECTRONICS CO LTD [KR]		<input type="checkbox"/>
	183	EP1182799A2	02-27-2002	LUCENT TECHNOLOGIES INC [US]		<input type="checkbox"/>
	184	EP1185015	03-06-2002	ALCATEL (FR)		<input type="checkbox"/>
	185	EP1185048A2	03-06-2002	NORTEL NETWORKS LTD [CA]		<input type="checkbox"/>
	186	EP1265411	12-11-2002	SONY INTERNATIONAL GMBH [DE]		<input type="checkbox"/>
	187	EP1315311A1	05-28-2003	FUJITSU LTD [JP]		<input type="checkbox"/>

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		Country Code ³ -Number ⁴ Kind Code ⁵ (if known)				
	188	EP1379020	01-07-2004	NATIONAL UNIVERSITY OF SINGAPORE.		<input type="checkbox"/>
	189	EP1387545	02-04-2004	SAMSUNG ELECTRONICS CO., LTD. [KR]		<input type="checkbox"/>
	190	EP1556984A2	07-27-2005	QUALCOMM INC [US]		<input type="checkbox"/>
	191	GB2373973A	10-02-2002	TOSHIBA RESEARCH EUROPE LIMITED INCORPORATED [UK]		<input type="checkbox"/>
	192	JP03104430	05-01-1991	NIPPON TELEGRAPH & TELEPHONE CORP.		<input type="checkbox"/>
	193	JP09135230	05-20-1997	JISEDAI DIGITAL TELEVISION HOSO SYST KENKYUSHO:KK.		<input checked="" type="checkbox"/>
	194	JP09327073	12-16-1997	N T T IDO TSUSHINMO KK.		<input type="checkbox"/>
	195	JP10028077	01-27-1998	SATO TAKURO WATANABE SOICHI ABE TAKEO.		<input type="checkbox"/>
	196	JP10327126	12-08-1998	LUCENT TECHNOLOGIES, INC.		<input type="checkbox"/>
	197	JP11252037A	09-17-1999	LUCENT TECHNOLOGIES INC.		<input type="checkbox"/>
	198	JP2000092009A	03-31-2000	SONY CORP.		<input type="checkbox"/>
	199	JP2001231074	08-24-2001	NORTEL NETWORKS LTD.		<input type="checkbox"/>
	200	JP2001237751	08-31-2001	LUCENT TECHONOLOGIES INC.		<input type="checkbox"/>

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		Country Code ³ - Number ⁴ Kind Code ⁵ (if known)				
	201	JP200186045	03-30-2001	LUCENT TECHNOLOGIES, INC.		<input type="checkbox"/>
	202	JP2002111627	04-12-2002	SONY INTERNATL EUROP GMBH.		<input type="checkbox"/>
	203	JP2002164814	06-07-2002	NIPPON SOKEN INC., et al.		<input type="checkbox"/>
	204	JP2002176379A	06-21-2002	JAPAN TELECOM CO LTD.		<input type="checkbox"/>
	205	JP2002204217	07-19-2002	NTT DOCOMO INC.		<input type="checkbox"/>
	206	JP200264879	02-28-2002	SK TELECOM CO LTD.		<input checked="" type="checkbox"/>
	207	JP200277098	03-15-2002	MITSUBISHI ELECTRIC CORP.		<input type="checkbox"/>
	208	JP200277104	03-15-2002	MITSUBISHI ELECTRIC CORP.		<input type="checkbox"/>
	209	JP2003504941	02-04-2003	SAMSUNG ELECTRONICS CO LTD.		<input type="checkbox"/>
	210	JP9266466	10-07-1997	SUMITOMO ELECTRIC INDUSTRIES [JP]		<input type="checkbox"/>
	211	JP9512156	12-02-1997	KONLE TILMAR [DE]		<input type="checkbox"/>
	212	KR1020020003370	01-12-2002	NTT DOCOMO, INC.		<input type="checkbox"/>
	213	RU2015281C1	06-30-1994	KONDRASHOV BORIS MIKHAILOVICH.		<input type="checkbox"/>
	214	RU2141168	11-10-1999	MOTOROLA LIMITED [GB]		<input type="checkbox"/>
	215	RU2152132	06-27-2000	J NII SVJAZI, et al.		<input type="checkbox"/>
	216	RU2157592	10-10-2000	QUALCOMM INCORPORATED.		<input type="checkbox"/>
	217	RU2158479C2	10-27-2000	AL KATEL N V [NL]		<input type="checkbox"/>

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		Country Code ³ - Number ⁴ Kind Code ⁵ (if known)				
	218	RU2168278	05-27-2001	KORPORATSIJA SAMSUNG EHLEKTRON [KR]		<input type="checkbox"/>
	219	TW419912	01-21-2001	INDUSTRIAL TECHNOLOGY RESEARCH INSTITUTE.		<input type="checkbox"/>
	220	WO00062456	10-19-2000	SAMSUNG ELECTRONICS CO., LTD. [KR]		<input type="checkbox"/>
	221	WO0011823A1	03-02-2000	RADIX TECHNOLOGIES, INC. [US]		<input type="checkbox"/>
	222	WO0036764A2	06-22-2000	NOKIA NETWORKS OY [FI]		<input type="checkbox"/>
	223	WO01071928	09-27-2001	QUALCOMM INCORPORATED [US]		<input type="checkbox"/>
	224	WO01097400	12-20-2001	QUALCOMM INCORPORATED [US]		<input type="checkbox"/>
	225	WO0126269	04-12-2001	SAMSUNG ELECTRONICS CO., LTD [KR]		<input type="checkbox"/>
	226	WO0169801A2	09-20-2001	INTERDIGITAL TECH CORP [US]		<input type="checkbox"/>
	227	WO0201732A2	01-03-2002	NOKIA CORPORATION [FI]		<input type="checkbox"/>
	228	WO0203557A1	01-10-2002	IOSPAN WIRELESS INC [US]		<input type="checkbox"/>
	229	WO02060138	08-01-2002	QUALCOMM INCORPORATED [US]		<input type="checkbox"/>
	230	WO02065664	08-22-2002	QUALCOMM INCORPORATED [US]		<input type="checkbox"/>

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				Application Number	10/692,833	
				Filing Date	2003-10-23	
				First Named Inventor	J. Rodney Walton	
				Art Unit	2618	
				Examiner Name	Simon Nguyen	
Sheet	14	of	18	Attorney Docket No: 030060		

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ Kind Code ⁵ (if known)				
	231	WO02069523A1	09-06-2002	MAGNOLIA BROADBAND INC [US]		<input type="checkbox"/>
	232	WO02082689A2	10-17-2002	MOTOROLA INC [US]		<input type="checkbox"/>
	233	WO02099992	12-12-2002	QUALCOMM INCORPORATED [US]		<input type="checkbox"/>
	234	WO0215433A1	02-21-2002	FUJITSU LIMITED [JP]		<input type="checkbox"/>
	235	WO03028153	04-03-2003	ARRAYCOM, INC. [US]		<input type="checkbox"/>
	236	WO03034646A2	04-24-2003	NORTEL NETWORKS LTD [CA]		<input type="checkbox"/>
	237	WO03047140A1	06-05-2003	FUJITSU LIMITED.		<input type="checkbox"/>
	238	WO04002011	12-31-2003	QUALCOMM INCORPORATED [US]		<input type="checkbox"/>
	239	WO04002047	12-31-2003	QUALCOMM INCORPORATED [US]		<input type="checkbox"/>
	240	WO04039022	05-06-2004	QUALCOMM INCORPORATED [US]		<input type="checkbox"/>
	241	WO199809395	03-05-1998	THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY, US.		<input type="checkbox"/>
	242	WO96022662	07-25-1996	ARRAYCOMM INC [US]		<input type="checkbox"/>
	243	WO96035268	11-07-1996	QUALCOMM INCORPORATED [US]		<input type="checkbox"/>
	244	WO98026523	06-18-1998	ERICSSON INC. [US]		<input type="checkbox"/>
	245	WO98030047A1	07-09-1998	ARRAYCOM, INC. [US]		<input type="checkbox"/>
	246	WO9809381	03-05-1998	THE BOARD OF TRUSTEES OF THE		<input type="checkbox"/>

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				Application Number	10/692,833	
				Filing Date	2003-10-23	
				First Named Inventor	J. Rodney Walton	
				Art Unit	2618	
				Examiner Name	Simon Nguyen	
Sheet	15	of	18	Attorney Docket No: 030060		

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		Country Code ³ -Number ⁴ Kind Code ⁵ (if known)				
				LELAND STANFORD JUNIOR UNIVERSITY.		
	247	WO9824192A1	06-04-1998	TRW INC [US]		<input type="checkbox"/>
	248	WO99016214	04-01-1999	COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION.		<input type="checkbox"/>
	249	WO9903224A1	01-21-1999	ERICSSON TELEFON AB L M [SE]		<input type="checkbox"/>
	250	WO9957820	11-11-1999	ARRAYCOM, INC. [US]		<input type="checkbox"/>

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	251	3GPP2 TIA/EIA/IS-2000.2-A, "Physical Layer Standard for cdma2000: Standards for Spread Spectrum Systems," (March 2000), Telecommunications Industry Association, pp. 1-446.	<input type="checkbox"/>
	252	BINGHAM, John A.C.: "MULTICARRIER MODULATION FOR DATA TRANSMISSION: AN IDEA WHOSE TIME HAS COME," IEEE COMMUNICATIONS MAGAZINE, PAGES 5-14 (MAY 1990).	<input type="checkbox"/>
	253	CHUNG, J. et al: "Multiple antenna systems for 802.16 systems." IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >, IEEE 802.16abc-01/31, 2001-09-07, Pages 1-5.	<input type="checkbox"/>
	254	DENEIRE, Luc, et al.: "A LOW COMPLEXITY ML CHANNEL ESTIMATOR FOR OFDM," PROC IEEE ICC (JUNE 2001), pp. 1461-1465.	<input type="checkbox"/>
	255	DIGGAVI, S. et al., "Intercarrier interference in MIMO OFDM," IEEE International Conference on Communications, (August 2002), Vol. 1, pp. 485-489, doi: 10.1109/ICC.2002.996901.	<input type="checkbox"/>

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				Filing Date	2003-10-23
				First Named Inventor	J. Rodney Walton
				Art Unit	2618
				Examiner Name	Simon Nguyen
Sheet	16	of	18	Attorney Docket No: 030060	

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	256	GAO, J. et al. "On implementation of Bit-Loading Algorithms for OFDM Systems with Multiple-Input Multiple Output," VTC 2002-Fall. 2002 IEEE 56th. Vehicular Technology Conference Proceedings. Vancouver, Canada, (Sept. 24-28, 2002), IEEE Vehicular Technology Conference, pp. 199-203.	<input type="checkbox"/>	
	257	GORE D. A., ET AL. "Selecting an optimal set of transmit antennas for a low rank matrix channel," 2000 IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING. PROCEEDINGS. (ICASSP). ISTANBUL, TURKEY, JUNE 5-9, 2000, NEW YORK, NY; IEEE, US, vol. 5 of 6, 5 June 2000 (2000-06-05), pages 2785-2788, XP001035763, abstract.	<input type="checkbox"/>	
	258	HASSIBI, B. et al., "High Rate Codes That Are Linear In Space And Time," LUCENT Technologies, 2002, pp. 1-55.	<input type="checkbox"/>	
	259	Hayashi, K. et al.: "A New Spatio-Temporal Equalization Method Based On Estimated Channel Response," September 2001, IEEE Transactions on Vehicular Technology, Vol. 50, No. 5, pp. 1250-1259.	<input type="checkbox"/>	
	260	ISERTE, P., et al., "Joint beamforming strategies in OFDM-MIMO systems," Acoustics, Speech, and Signal Processing, 1993. ICASSP-93., 1993 IEEE International Conference on , vol.3, sections 2-3, 27-30 April 1993, doi: 10.1109/ICASSP.2002.1005279.	<input type="checkbox"/>	
	261	Jongren, G. et al.: "Utilizing Quantized Feedback Information In Orthogonal Space-Time Block Coding," 2000 IEEE Global Telecommunications Conference, 2(4): 995-999, November 27, 2000.	<input type="checkbox"/>	
	262	KIESSLING, M. et al., "Short-term and long-term diagonalization of correlated MIMO channels with adaptive modulation" IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, Vol. 2, September 15, 2002, pp. 593-597.	<input type="checkbox"/>	
	263	LEBRUN G., et al., "MIMO transmission over a time varying TDD channel using SVD," Electronics Letters, 2001, Vol. 37, pp.1363-1364.	<input type="checkbox"/>	
	264	LI, Ye et. al., "Simplified Channel Estimation for OFDM Systems with Multiple Transmit Antennas," IEEE Transactions on Wireless Communications, January 2002, Vol. 1, No. 1, pp. 67-75.	<input type="checkbox"/>	
	265	MIYASHITA, K. et al: "High data-rate transmission with eigenbeam-space division multiplexing (E-SDM) in a MIMO channel," VTC 2002-FALL. 2002 IEEE 56TH. VEHICULAR TECHNOLOGY CONFERENCE PROCEEDINGS. VANCOUVER, CANADA, SEPT. 24 - 28, 2002, IEEE VEHICULAR TECHNOLOGY CONFERENCE, NEW YORK,	<input type="checkbox"/>	

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		NY: IEEE, US, vol. VOL. 1 OF 4. CONF. 56, (24 September 2002), pp. 1302-1306, XP010608639.		
	266	Office Action in Canadian application 2501634 corresponding to US application 10/610,446, citing CA2690247 dated 2011-02-25 (030031CA) .	<input type="checkbox"/>	
	267	SAMPATH, H., et al., "Joint transmit and receive optimization for high data rate wireless communication using multiple antennas," Signals, Systems, and Computers, 1999. Conference Record of the Thirty-Third Asilomar Conference, 24 October 1999 (1999-10-24), XP010373976, pp. 215-219, IEEE, Piscataway, NJ, US.	<input type="checkbox"/>	
	268	The Authoritative Dictionary of IEEE Standards Terms, Seventh Edition, IEEE Press: New York (December 2000), Page 902.	<input type="checkbox"/>	
	269	Translation of Office Action in Japanese application 2005-501686 corresponding to US application 10/375,162, citing JP09135230 dated 2011-02-15 (030075JP) .	<input type="checkbox"/>	
	270	U.S. Provisional Appl. No. 60/421,309.	<input type="checkbox"/>	
	271	U.S. Provisional Appl. No. 60/421,428.	<input type="checkbox"/>	
	272	WALES, S.W. "A mimo technique within the UTRA TDD standard," MIMO: Communications Systems from Concept to Implementations (Ref. No. 2001/175), IEE Seminar on, (12/12/2001), pp. 1-8., London, UK.	<input type="checkbox"/>	
	273	Wolniansky, P.W.; Foschini, G.J.; Golden, G.D.; Valenzuela, R.A.; "V-BLAST: an architecture for realizing very high data rates over the rich-scattering wireless channel," Signals, Systems, and Electronics, 1998. ISSSE 98. 1998 URSI International Symposium, pp.295-300, (29 Sep-2 Oct 1998), doi: 10.1109/ISSSE.1998.738086 .	<input type="checkbox"/>	
	274	WONG, Cheong, et al., "Multiuser OFDM with Adaptive Subcarrier, Bit and Power Allocation," October 1999, IEEE Journal on Selected Areas in Communications, Vol. 17, No. 10, pages 1747-1758.	<input type="checkbox"/>	
	275	WONG K. K., et al., "Optimizing time and space MIMO antenna system for frequency selective fading channels," IEEE Journal on Selected Areas in Communications, Vol. 19, No. 7, July 2001, Sections II and III and V, 1396, pp. 1395-1407.	<input type="checkbox"/>	

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